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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,702	03/10/2000	Jiandong Huang	H16-26157	5911

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HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER
NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/522,702	HUANG ET AL.
	Examiner	Art Unit
	Chau Nguyen	2142

-- *The MAILING DATE of this communication appears on th cover sh et with th correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2000* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .   6) ☐ Other: .

DETAILED ACTION

1.   Claims 1-27 are presented for examination.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

published under 35 U.S.C. 122(b).   Therefore, this application is examined under 35

U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 8, 17, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by

Coden, Patent No. 6,389,030.

4.   As to claims 8, 17, and 26, Coden discloses a method of managing

communication with non-fault tolerant network nodes in a fault-tolerant computer

network, comprising:

transmitting data from a transmitting node to a non-fault tolerant network node

over a primary network (col. 12, lines 21-64); and

5.   transmitting data from the transmitting node to the non-fault tolerant network

node over a redundant network (col. 12, lines 21-64).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

7.   Claims 1-2, 4-7, 10-11, 13-16, 19-20, 22-25 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Law, Jr. et al. (Law), Patent No. 6,370,654, and further in

view of Coden, Patent No. 6,389,030.

8.   As to claims 1, 10, and 19, Law discloses a method of managing communication

with non-fault tolerant network nodes in a fault-tolerant computer network, comprising:

determining network nodes present in a plurality of networks that are not fault-

tolerant and are connected to only a single network (Abstract);

determining the network on which each non-fault tolerant network node exists

(Abstract);

However, Law does not substantially discloses storing the detected network

address data of the non-fault tolerant network nodes and storing associated network

data comprising the network on which the non-fault tolerant network node exists

therewith and sending data intended for a non-fault tolerant network node over only the

network on which the non-fault tolerant network node has been determined to exist.   In

the same field of endeavor, Coden discloses a ring switch may maintain an address

table for all of the ports of the ring switch, and also use a number of bits associated with

each address in the table to indicate the port associated with the address (col. 9, lines

43-65).   In addition, Coden discloses determining where to switch a data packet by

checking at the address table and transferring the data packet from the ring-in port to

the port indicated in the address table (col. 12, lines 21-58).   Thus, it would have been

obvious to one of ordinary skills in the art at the time the invention was made to

combine the teachings of Law and Coden to include storing the detected network

address data of the non-fault tolerant network nodes and storing associated network

data comprising the network on which the non-fault tolerant network node exists

therewith and sending data intended for a non-fault tolerant network node over only the

network on which the non-fault tolerant network node has been determined to exist.

Coden suggests that by doing so, it provides low and efficient transport mechanism.

9.   As to claims 2, 11, and 20, Law and Coden (Law-Coden) disclose wherein

determining the network addresses of non-fault-tolerant network nodes comprises

detection of network address information that the non-fault-tolerant network nodes send

over a network (Coden, col. 9, lines 43-65).

10.   As to claims 4, 13, and 22, Law-Coden disclose wherein determining the network

on which each non-fault-tolerant network node exists comprises determining which

network interface received the network address information sent from each non-fault-

tolerant network node (Coden, col. 11, line 66 – col. 12, line 9).

11.   As to claims 5, 14, and 23, Law-Coden disclose wherein storing the data

comprises populating a non-fault-tolerant network node address table (Coden, col. 9,

lines 43-65).

12.   As to claims 6, 15, and 24, Law-Coden disclose sending data intended for a non-

fault-tolerant network node over both the primary and redundant network if the network

on which the non-fault-tolerant network node exists has not been determined (Coden,

col. 12, lines 59-63)

13.   As to claims 7, 16, and 25, Law-Coden disclose wherein determination of whether the network on which the non-fault-tolerant network node exists has been determined comprises:

searching an address table for the stored data (Coden, col. 12, lines 21-64);

determining the network on which the non-fault-tolerant network node exists has been determined if the address table contains an entry for the non-fault-tolerant network node (Coden, col. 12, lines 21-64); and

determining the network on which the non-fault-tolerant network node exists has not been determined if the address table does not contain an entry for the non-fault-tolerant network node (Coden, col. 12, lines 21-64).

14.   Claims 3, 12, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law, Jr. et al. (Law), Patent No. 6,370,654, Coden, Patent No. 6,389,030, and further in view of Hart, Patent No. 5,862,344.

15.   As to claims 3, 12, and 21, Law-Coden disclose the limitations as discussed in claims 1, 3-8 above. However, Law-Coden don't substantially disclose wherein the network address information that is sent comprises Internet Protocol Address Resolution Protocol packets (IP ARP packets). In the same field of endeavor, Hart discloses Address Resolution Protocol stream is a special stream to the TCP/IP stack that is to used to pass Address Resolution Protocol frames to the IP layer in the TCP/IP

stack (col. 10, lines 38-54). Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Law-Coden and Hart to include the network address information that is sent comprises Internet Protocol Address Resolution Protocol packets. By doing so, it would determine the availability of certain protocol addresses.

16.   As to claims 9, 18, and 27, Law-Coden and Hart disclose receiving and retransmitting the data via an intermediate node when the transmitting node is unable to communicate with both the primary and redundant networks, such that if the intermediate node receives the data via the redundant network it retransmits the data on the primary network and if the intermediate node receives the data via the primary network it retransmits the data on the redundant network (Hart, col. 1, lines 26-38).

Conclusion

1.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 305-4639. The Examiner can normally be reached on Monday-Friday from 7:30am to 4:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Powell, can be reached at (703) 305-9703.

The fax phone numbers for the organization where this application is assigned are as follows:

(703) 746-7238   (After Final Communications only)

(703) 746-7239   (Official Communications)

(703) 746-7240(for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900.

MARC THOMPSON

Chau Nguyen   Marc Thompson
Patent Examiner   Patent Examiner
Art Unit 2142   Art Unit 2142